Northeast Coastal and Barrier Network
Protocol Development Summary
(Sept. 2005)

Protocol: Visitor Use

Parks Where Protocol will be Implemented: ASIS, CACO, COLO, FIIS, GATE, GEWA, SAHI and THST

Justification/Issues being addressed:
In highly visited parks such as in the Northeast Coastal and Barrier Network (NCBN), it is critically important for park managers to know how many visitors they have and what activities those visitors are participating in over time. Twenty years ago, recreation activities did not include things like jet-skiis or mountain bikes. The types and frequency of activities have changed over time. As park use changes, so must management practices. Without quantitative data on the types, amounts and distribution of activities occurring in the parks, managers are unable to develop reliable and sufficient park plans.

Park managers must have documentation of the full range of activities occurring within their parks, how many people are doing each activity, and where these activities are occurring, as well as information on the changes in these activities over time, in order to understand the linkages between the condition of resources and specific park uses of concern. These data can also provide some indication of how changes in park management are reflected in park uses of natural areas.

Monitoring Goals, Questions and Objectives to be Addressed by the Protocol:
NCBN Goal:
Provide information to NCBN park managers that will lead to a better understanding of park visitor use patterns and intensity.

Monitoring Questions:
In areas of critical concern, how is visitor use changing over time?

What types of activities (recreational or other) are occurring in parks and how are they changing over time?

Monitoring Objective 1:
Determine both the seasonal and long-term trends in the distribution and abundance of visitors and associated activity types in NCBN parks.

Vital Sign:
Visitor use

Measures:
Distribution and abundance of visitors, distribution and abundance of activity type

Justification:

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Basic Approach for all Vital Signs:
Visitor use monitoring methods have not yet been determined by the Network. Following a workshop held by the Network in 2005, participants concurred that a stratified, random sampling design would be the most appropriate. The sampling could be stratified to include sampling within each park's major habitat types and use areas, including both official and unofficial recreation sites. These samples will then be used to estimate park uses within all habitat types and use areas, as well as trends in these variables over time. Park use data (activity type, distribution, and density) will most likely be collected by direct counts and mapping in the field.

Behavior observation, a social science technique, can also be used to measure visitor use and associate activities. In visitor observation, human behaviors that cause impacts are systematically observed. Of the techniques available, behavior observation holds the greatest promise. This method is the most flexible and adaptable to all park environments, can be applied effectively away from trailheads, and provides a greater quantity and diversity of information on visitation attributes.

Methods will be further researched and developed by the Network as part of protocol development, scheduled to occur in 2006-2007.

Principal Investigators and NPS Lead:
The project scoping has been completed through a cooperative agreement with Sterling College, principal investigator Dr. Christopher Monz and Dr. Yu-Fai Leung. Protocol development is scheduled to being in 2006.
The NPS leads: Bryan Milstead, Sara Stevens, Marc Albert,

Development Schedule, Budget, and Expected Interim Products:
Two scoping reports were produced and served as the basis for vital signs selection (Monz and Leung 2003a-b). The next phase of this project will be to establish a small workgroup to develop a scope of work to compete protocol development. The Network budgeted $58,000 in FY 2003 and $37,000 in FY 2004.

Literature Cited:
Monz C. and Y. Leung. 2003a. Phase 1 Project Report, National Park Service Coastal Visitor Impact Monitoring.
Monz C. and Y. Leung. 2003b. Phase 2 Project Report, National Park Service Coastal Visitor Impact Monitoring.

Marion, J.L. and K. Cahill. 2003. Design and Testing of Protocols for Monitoring Visitor Use and Resource Impacts at Cape Cod National Seashore. Unpublished report. Cape Cod National Seashore, MA.

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